



ROLE OF SIRA VYADHA- AJMODADI VATAKA IN THE MANAGEMENT OF GRIDHRASI (SCIATICA)

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ABSTRACT

In various Samhita of Ayurveda, about Gridhrasi there are lots of references and it is elaborated as a separate disease with specific management. The disease Gridhrasi is commonly seen in society as a prominent problem. In this condition patient become incapable to do his daily routine work because of severe pain from kati pradesha to Padaanguli with cardinal symptoms like Sakthiakshepannigraheet. The Present clinical trial was planned to develop an Ayurvedic regimen for the management of Gridhrasi by taking Samshodhana karma along with Samshana chikitsa. In the chikitsa sutra of Gridhrasi Acharya Sushruta, Charak, Vagbhatta, Bhela have mentioned Siravyadh. The present study was taken up with the objective of evaluating the efficacy of Siravyadha and Ajmodadi Vatak in the management of pain in Gridhrasi. The duration of trial was three Months and patient were examined monthly. Total 45 patients were registered for the clinical trial which were divided in to three groups, 15 in each groups. Group A were treated with Siravyadh, Group B were treated with Ajmodadi Vatak and Group C were treated with Combined therapy. The result showed that there was significant reduction in the symptomatic parameters in combined therapy, when compared to the group A and Group B.

Keyword: Gridhrasi, Siravyadh, Ajmodadi Vatak. S.L.R. etc.

INTRODUCTION

Ayurveda is simple practical science of life; its principles are universally applicable to each individual for daily existence. Each and every human being desires to live happy and comfortable life, but it is not possible owing to multifactors related with changing life style, environmental factors etc. As per data available 80% of population in modern industrial society experience back pain at sometime during their life, fortunately in some of these it subsides within a month. But unfortunately, as many as 70% of this pain recurs, out of these many of

them converts into Sciatica patients as time passes. The disease *Gridhrasi* (Sciatica) is commonly seen in society as a prominent problem; in this condition patient become incapable to do his daily routine work because of severe pain from *Kati (lumbar) pradesha* to *Padanguli* (foot). In reference to sciatica treatment there is nozzz need to state that in other medical sciences only the symptomatic management and also few surgical procedures with interest of adverse reaction. In various samhita of Ayurveda, about *Gridhrasi* there are lots of references and it is elaborated as a separate disease with specific management. The disease, *Gridhrasi* classified into two categories viz. *Samanyaja* and *Nanatmaja*. Nanatmaja diseases are those who are resulting to the vitiation of one dosha only.

Charakacharya quoted *Gridhrasi* in *Vataja*, *Nanatmaja vyadhi* and also enumerated under *Mahagada* that indicates difficulty to cure it. It is characterized by its distinct pain emerging from *Sphika Pradesha* and goes towards the *Parshni Pratyangulina* of the affected side. In all ayurvedic texts, there is no direct reference regarding *Nidana* and *chikitsa* of *Gridhrasi* but as *Gridhrasi* is mentioned under *Nanatmaja Vata vyadhi*. So here general *Vataprakopaka hetu* are to be considered. And *Charaka* and *Madhava* mentioned symptoms of *Gridhrasi* like *Bhaktadvesha*, *Gaurva*, *Tandra*, *Aruchi*, *Mukhapraseka* in *Vata-kaphaja* type of *Gridhrasi*. So indirectly *Kapha prakopaka nidana* and *Agnimandya hetu* are to be considered. On the basis of symptoms of *Gridhrasi* can be equated with the disease *Sciatica* in parlance. *Sciatica* is the term given to pain down the leg, which is caused by irritation of the main nerve into legs, sciatica nerve. This pain tends to be caused where the nerve passed through an emerged from the lower bone of spine i.e. lumber vertebrae. In Ayurvedic texts, there are various method used as a line of treatment, some of which are effective, simple, safe and cheap for the patient e.g. *Siravedha*, *Agnikarma*, *Basti chikitsa*, *Snehana*, *Swedana* On the other hand in Ayurveda various types of management regarding *Gridhrasi* (*Sciatica*) are indicated e.g. *Snehana*, *Swedana*, *Basti Chikitsa*, *Shamana yoga*, *Siravedha*. But in these *chikitsa*, did not get *Siddha Hastata*. Keeping this point in mind as per *Sushrutacharya's principles*, the study was designed as a comparative study to assess the efficacy of therapeutical procedure alone and comparatively. The present study entitled "***Role of Sira vyadha – Ajmodadi vataka in the management of Gridhrasi (Sciatica)***" is planned and conducted to understand the effect of *Siravyadha* and *Ajmodadi vataka* alone and combined therapy in *Gridhrasi*. In present study under literary section part all the scattered description about *Gridhrasi*, *Siravyadha* and *Ajmodadi vati* was prepared and used in systemic manner. In clinical study, the effect of *Siravyadha* and *Ajmodadi vati* has been assessed. This study was carried out on total 45 patients. The subject has been divided in to three groups. Group A (*Siravyadh*), Group B (*Ajmodadi vati*) and Group C was taken combined therapy. The obtained data was then subjected to various stastistical analysis.

MATERIALS & METHOD

Total 45 patients were registered for the clinical trial which were divided in to three groups, 15 in each group, 'A', 'B' and 'C'.

In Group A (Sira Vyadha) : The patient of this group will be treated with sira vyadha. **In Group B (Ajmodadi Vati) :** In this group, *Ajmodadi vati* was given 500 mg/BD with lukewarm water for 30 days.

In Group C (Combined Therapy): In this group, both the therapies were given. **Consent :** A written and informed consent form was signed by the subject before enrolling them for research work.

IEC Approval: Synopsis was approved by the Institutional ethical committee of V. Y.D.S. Ayurveda Mahavidyalaya, Khurja for research on Human.

Proforma: The patients were assessed on the basis of prepared proforma that include all the subjective parameters, objective parameters, investigatory parameters to record the details of an individuals. For the present work entited “ **ROLE OF SIRA VYADHA- AJMODADI VATAKA IN THE MANAGEMENT OF GRIDHRASI (SCIATICA)** has been conducted under two section: The present study is comprised of the following points:-

- Selection of patients, Laboratory investigations, Grouping of patients, Administration of trail regimen, Parameters for the assessment of result

The entire study consists –Conceptual Contrive and Clinical Contrive

- 1) **Conceptual Contrive:** In this section, detailed study of the disease has been carried out on Ayurvedic and modern point of view. Detailed review of the selected procedure under trial along with drug used has been incorporated.
- 2) **Clinical Contrive:** The study was exclusively based on clinical trial. A detailed research proforma was prepared to observe the patient’s history as well the disease pathology.

The patients attending the O.P.D. & I.P.D. of department of Shalya- VYDS Khurja were selected irrespective of their age, sex, religion etc.

Criteria of Selection of Patient

Patients were diagnosed mainly on the basis of signs and symptoms available in Ayurved and modern medicine.

- Ruka, Toda, Stambha, Spandana, sakthanakshepananigrahanityat
- S.L.R. test, laseuge sign, sitting test in affected leg for diagnosis as well as prognosis of the treatment, walking time and X-ray (A/P view, lateral view of lumbar spine) and routine hematological and other useful test were done to exclude another pathogenesis.

Criteria For the Exclusion

The patient with – Pregnancy, Tuberculosis, Uncontrolled Diabetes mellitus. Hypertension, Vertebral disorder patient.

Management After diagnosis of the patients were randomly categorized into three groups as given below. Total 45 patients were registered for the clinical trial which were divided in to three groups, 15 in each group, ‘A’, ‘B’ and ‘C’.

Group A (Sira Vyadha) : The patient of this group will be treated with sira vyadha.

Group B (Ajmodadi Vati) : In this group, Ajmodadi vati was given 500 mg/BD with lukewarm water for 30 days.

Group C (Combined Therapy) : In this group, both the therapies were given.

Criteria For Assessment:

The improvement in the patient was assessed mainly on the basis of relief in the cardinal signs and symptoms of the disease. To assess the effect of therapy objectively, all the signs and symptoms were given scoring depending upon their severity as below:

Lakshana	No	Mild	Moderate	Severe
Ruka	0	1	2	3
Stambha	0	1	2	3
Toda	0	1	2	3
Spandana	0	1	2	3
Aruchi	0	1	2	3
Tandra	0	1	2	3
Gaurava	0	1	2	3
S.L.R. Test	0	1	2	3
Shotha	0	1	2	3
Reflex	0	1	2	3

Walking Time:

25 feet distance with patient's maximum possible speed of walking and time is recorded in second by stop watch B.T. & A.T.

Criteria For Assessing the Total Effect:

The result of patient clinical trial was grouped as follows-

* **Arogya** (Relieved)

* **Kinchit Arogya** (Improved)

(1) More improved

(2) Less improved

* **Anarogya** (Not improved)

* **Aarogya** (Relived) - This was decided on the following points-

(a) Patients get more than 80% or complete relief in the initial sign and symptoms along with positive improvement in health.

(b) No recurrence of disease up to follow up period.

(c) Improvement in radiological finding.

* **Kinchit Aarogya** (Improved) - This was divided into two groups

(1) **More Improved-**

This was decided on the basis of 50%-80% relief in initial sign and symptoms.

There may or may not be recurrence of disease.

Improvement in radiological finding.

(2) **Less improved-**

When patient got less than 50% relief in initial sign and symptoms.

There may or may not be recurrence of disease.

No improvement in radiological finding.

* **Anarogya** (Not Improved)

When there is no significant change in symptomatology and in radiological findings without drug to assess the condition of patients and observe the relapse (if any)

OBSERVATIONS & RESULTS

Table – 1 : Distribution of Patients according to Age.

Age Group	Group A		Group B		Group C	
	No.	%	No.	%	No.	%
< 30 yr	3	20.0%	3	20.0%	1	6.7%
30 - 39 yr	6	40.0%	4	26.7%	4	26.7%
40 - 49 yr	2	13.3%	6	40.0%	4	26.7%
>= 50 yr	4	26.7%	2	13.3%	6	40.0%

Table 1 represent the no. of patient in each age group. All the registered patients were in a age group with minimum of 18 years and maximum 60 years. According to age, they were divided into four groups. 20.0% patients of group A, 20.0% patients of group B and 6.7% patients of group C are under age group of 30 yrs. 40.0% patients of group A, 26.7% patients of group B and 26.7% patients of group C are under age group of 30-39 yrs. 13.3% patients of group A, 40.0% patients of group B and 26.7% patients of group C are under age group of 40-49 yrs. 26.7% patients of group A, 13.3% patients of group B and 40.0% patients of group C are under age group of >=50 yrs.

Table – 2: Distribution of Patients according to Prakriti

Prakriti	Group A		Group B		Group C	
	No.	%	No.	%	No.	%
PK	3	20.0%	4	26.7%	3	20.0%

VK	9	60.0%	10	66.7%	10	66.7%
VP	3	20.0%	1	6.7%	2	13.3%

Table 2 represent the Prakriti of patients among groups. In group B and group C both having maximum (66.7%) patients with V-K prakriti, while 60.0% subjects in group A. Patients having P-K prakriti were 20.0% in group A, 26.7% in group B and 20.0% in group C. while patients with V-P prakriti are 20.0% in group A, 6.7% in group B and 13.3% in group C. The majority of patients were in V-K prakriti 66.7% in group B and group C.

Table – 3 : Distribution of Patients according to Vayamashakti

Vayamashakti	Group A		Group B		Group C	
	No.	%	No.	%	No.	%
Avar	12	80.0%	10	66.7%	11	73.3%
Madhyam	3	20.0%	5	33.3%	4	26.7%
Pravar	0	0.0%	0	0.0%	0	0.0%

Table no. 3 revealed the vyayam shakti of patients among groups. In group A majority of the patients were having avar vyayamshakti i.e. 80.0% followed by 20.0% of madhyam vyayamshakti and with nil having pravar vyayamsakti in group A, B and C. maximum patients were having avar vyayam shakti in group A. followed by 73.3% avar vyayam shakti in group C and 66.7% in avar vyayam shakti in group B. whereas 33.3% patients of group B were having madhyam vyayam shakti followed by 26.7% patients of group C with madhyam vyayam shakti

RESULTS

Table – 4 : Intergroup Comparisons of Various parameters at Various Time of Study Period

Parameter	Time	Group A		Group B		Group C		Kruskal Wallis Test	
		Mean	SD	Mean	SD	Mean	SD	Chi-Square	p-value
Ruka	BT	2.80	0.41	2.87	0.35	2.33	0.82	5.60	.061
	1 st month	2.33	0.62	2.20	0.41	1.67	0.82	7.16	.028

	2 nd month	2.00	0.38	2.07	0.59	1.20	0.77	13.38	.001
	3 rd month	1.20	0.68	1.53	0.83	0.53	0.64	12.45	.002
	AT	1.20	0.68	1.53	0.83	0.53	0.64	12.45	.002
Stambha	BT	2.67	0.90	3.07	0.59	2.33	0.82	7.16	.028
	1 st month	2.13	0.74	2.40	0.51	1.67	0.82	6.76	.034
	2 nd month	1.73	0.80	1.73	0.70	1.07	0.70	8.09	.017
	3 rd month	1.00	1.00	1.33	0.82	0.47	0.74	7.86	.020
	AT	1.00	1.00	1.33	0.82	0.47	0.74	7.86	.020
Toda	BT	2.80	0.77	3.07	0.46	2.07	0.80	13.36	.001
	1 st month	1.93	0.80	2.27	0.46	1.40	0.74	11.07	.004
	2 nd month	1.53	1.06	1.53	0.74	1.07	0.59	2.67	.263
	3 rd month	0.93	1.03	1.33	0.90	0.73	0.70	3.29	.193
	AT	0.93	1.03	1.33	0.90	0.73	0.70	3.29	.193
Spandan	BT	2.20	1.26	2.93	0.59	1.07	1.28	14.29	.001
	1 st month	1.67	1.18	2.20	0.56	0.93	1.03	10.35	.006
	2 nd month	1.20	1.08	1.87	0.74	0.73	0.70	10.73	.005
	3 rd month	1.07	0.96	1.33	0.90	0.47	0.74	7.48	.024
	AT	1.07	0.96	1.33	0.90	0.47	0.74	7.48	.024
Aruchi	BT	2.33	0.72	2.80	0.41	1.33	1.11	15.45	.000
	1 st	1.80	0.86	2.20	0.41	0.93	0.70	17.61	.000

	month								
	2 nd month	1.27	0.80	1.80	0.68	0.73	0.70	12.38	.002
	3 rd month	0.93	1.03	1.27	0.88	0.33	0.62	9.02	.011
	AT	0.93	1.03	1.27	0.88	0.33	0.62	9.02	.011
Tandra	BT	2.60	0.63	2.87	0.35	2.13	0.74	9.66	.008
	1 st month	1.87	0.64	2.13	0.35	1.33	0.49	14.73	.001
	2 nd month	1.53	0.64	1.53	0.74	0.93	0.59	7.02	.030
	3 rd month	1.00	1.00	1.07	1.03	0.27	0.46	6.92	.031
	AT	1.00	1.00	1.07	1.03	0.27	0.46	6.92	.031
Gaurav	BT	2.07	0.88	2.73	0.46	1.40	1.12	12.42	.002
	1 st month	1.67	0.82	2.13	0.35	0.93	0.70	17.65	.000
	2 nd month	1.20	0.94	1.73	0.70	0.87	0.64	8.24	.016
	3 rd month	0.87	1.06	1.20	0.86	0.33	0.62	8.30	.016
	AT	0.87	1.06	1.20	0.86	0.33	0.62	8.30	.016
Sotha	BT	2.07	0.80	2.67	0.49	1.53	0.92	12.47	.002
	1 st month	1.60	0.83	2.20	0.68	1.13	0.74	12.51	.002
	2 nd month	1.27	0.88	1.87	0.64	0.80	0.56	13.58	.001
	3 rd month	0.87	0.99	1.33	0.90	0.53	0.64	6.14	.046
	AT	0.87	0.99	1.33	0.90	0.53	0.64	6.14	.046
S.L.R Test	BT	2.87	0.74	2.93	0.59	2.13	0.74	9.12	.010

	1 st month	2.07	0.80	2.27	0.59	1.20	0.68	13.96	.001
	2 nd month	1.47	0.92	1.60	0.74	0.87	0.64	6.78	.034
	3 rd month	1.00	1.00	1.13	0.99	0.27	0.46	8.07	.018
	AT	1.00	1.00	1.13	0.99	0.27	0.46	8.07	.018
Reflex	BT	2.20	0.86	2.73	0.46	1.33	1.11	13.24	.001
	1 st month	1.67	0.72	2.07	0.59	0.87	0.74	15.60	.000
	2 nd month	1.20	0.94	1.67	0.72	0.73	0.70	8.60	.014
	3 rd month	0.80	1.08	1.33	0.98	0.27	0.59	9.84	.007
	AT	0.80	1.08	1.33	0.98	0.27	0.59	9.84	.007
Walking Time	BT	27.00	5.89	26.67	9.31	24.93	6.27	1.24	.539
	AT	13.67	2.61	14.93	6.76	13.60	3.64	0.83	.659

For the parameter **Ruka**, significant differences among the groups were found at 1st month (p=0.028), 2nd month (p=0.001), 3rd month (p=0.002) and AT (p=0.002).

For the parameter **Stambha**, significant differences among the groups were found at BT (p=0.028), 1st month (p=0.034), 2nd month (p=0.017), 3rd month (p=0.020) and AT (p=0.020).

For the parameter **Toda**, significant differences among the groups were found at BT (p=0.001) and 1st month (p=0.004).

For the parameter **Spandan**, significant differences among the groups were found at BT (p=0.001), 1st month (p=0.006), 2nd month (p=0.005), 3rd month (p=0.024) and AT (p=0.024). For the parameter **S.L.R.**, significant differences among the groups were found at BT (p=0.010), 1st month (p=0.001), 2nd month (p=0.034), 3rd month (p=0.018) and AT (p=0.018).

Table – 5 : Improvement Status for S.L.R Test within the groups

S.L.R Test	Group A			Group B			Group C		
	% imp	z-value	p-value	% imp	z-value	p-value	% imp	z-value	p-value
1 st month	27.9	-3.46	0.001	22.7	-3.16	0.002	43.8	-3.74	<.001
2 nd month	48.8	-3.29	0.001	45.5	-3.18	0.001	59.4	-3.58	<.001
3 rd month	65.1	-3.22	0.001	61.4	-3.22	0.001	87.5	-3.50	<.001
AT	65.1	-3.22	0.001	61.4	-3.22	0.001	87.5	-3.50	<.001

In group A significant improvements were found from 1st month to AT with % imp 27.9%, 48.8%, 65.1% and 65.1% at 1st month, 2nd month, 3rd month and AT respectively.

In group B significant improvements were found from 1st month to AT with % imp 22.7%, 45.5%, 61.4% and 61.4% at 1st month, 2nd month, 3rd month and AT respectively.

In group C significant improvements were found from 1st month to AT with % imp 43.8%, 59.4%, 87.5% and 87.5% at 1st month, 2nd month, 3rd month and AT respectively.

Table – 6: Improvement Status for the Parameter Walking Time within the groups

Walking Time	Group A			Group B			Group C		
	% imp	z-value	p-value	% imp	z-value	p-value	% imp	z-value	p-value
AT	49.4	-3.42	0.001	44.0	-3.43	0.001	45.5	-3.43	0.001

For walking time, significant improvements were found at AT with proportion 49.4%, 44% and 45.5% in group A, group B and group C respectively.

Table – 7 : Overall Improvement Status

Status	Group A		Group B		Group C		chi sq	p-value
	No.	%	No.	%	No.	%		
Relieved (>80%)	8	53.3%	1	6.7%	6	40.0%	14.8	0.022
More Improved (50% - 80%)	2	13.3%	10	66.7%	8	53.3%		
Less Improved (20% - 49.9%)	3	20.0%	1	6.7%	1	6.7%		
Not Improved (<20%)	2	13.3%	3	20.0%	0	0.0%		
Total	15	100.0%	15	100.0%	15	100.0%		

Maximum improvement was found in group C (relieved 40%, More improved 53.3%) followed by the group A (relieved 53.3%, more improved 13.3%). The significant difference was observed in proportion of various levels of improvement among the groups ($p=0.022$)

Discussion

The present work entitled, “ **ROLE OF SIRA VYADHA- AJMODADI VATAKA IN THE MANAGEMENT OF GRIDHRASI (SCIATICA)**” has been framed to undertake a critical, literary, conceptual, clinical, trail drug study to evaluate the efficacy of different therapeutic regimens for the treatment of GRIDHRASI. In *Ayurveda* various herbal compounds are mentioned and advocated for the treatment of Gridhrasi. Presently there is no any specific management for Gridhrasi. So, assessment of efficacy by these drugs and procedure in management of Gridhrasi. The present drug trail was conducted on 45 patients of Gridhrasi. These patients were divided equally in 3 group ‘A’, ‘B’, and ‘C’ i.e. 15 in each group. The trial was conducted for 3 months. **Group A (Sira Vyadha)** :The patient of this group will be treated with sira vyadha. **Group B (Ajmodadi Vati)** :In this group, Ajmodadi vati was given 500mg/BD with lukewarm water for 30 days. **Group C (Combined Therapy)** : In this group, both the therapies were given.

Ajmodadi Vati (Chakradatta 25/51-55).

Each Vati of 500 mg Contains:

Ajmoda	1 part	Chitraka	1 part
Vidanga	1 part	Pippali Mula	1 part
Saindhava Lavana	1 part	Satahva	1 part
Pippali	1 part	Maricha	1 part
Devadaru	1 part	Haritaki	5 part
Vrudhadaru	10 part	Sunthi	10 part
Guda	*		

* = *Equal part of the rest of the drug.*

Dose: 500 mg/ BD in a day with lukewarm water.

SIRAVYADHA – A Procedure

All the registered subjects were in a age group with minimum of 18 years and maximum 60 years. They were further divided into three groups (A, B, C). This study shows that out of 45 patients 15.6% patients were of less than 30 years age groups, 31.1% were of 30-39 years age groups, 40-49 years and >50 years age groups were of 26.6%. This study shows that the maximum number of patients were in age groups of 30-50 years (i.e. 57.7%). Show it can be concluded tha the Gridhrasi Roga is a disease of Middle age groups.

Out of 45 patients, maximum number i.e. 64.4% of patients had Vataj-kaphaja Prakriti followed by 22.2% Pitta-kaphaja Prakriti and 13.3% Vata-Pittaja Prakriti. So it can be concluded that Gridhrasi Roga is more common in Patients having Vata dominance Prakriti that is Vata-Kaphaja and Vata-Pittaja, due to Srotorodha, Srotorodha is a precipitating factor for Gridhrasi Roga. In these patients due to Mandagni, Amarasa found which subsequently leads to srotorodha. **In group A:** significant improvements were found from 1st month to AT with % imp 16.7%, 28.6%, 57.1% and 57.1% at 1st month, 2nd month, 3rd month and AT respectively. **In group B:** significant improvements were found from 1st month to AT with % imp 23.3%, 27.9%, 46.5% and 46.5% at 1st month, 2nd month, 3rd month and AT respectively. **In group C :** significant improvements were found from 1st month to AT with % imp 28.6%, 48.6%, 77.1% and 77.1% at 1st month, 2nd month, 3rd month and AT respectively. **Intergroup Comparison :** The comparative observation in all three groups shows that after 1 month of treatment there were mild improvement in all three groups A, B and C. After two-month probability of improvement was 28.6% in group A and 27.9% in group B and 48.6% in group C. After third month probability of improvement was 57.1% in group A, 46.5% in group B and 77.1% in group C. Although all the three groups so improvement after treatment not only in grade of intensity of symptom but also in total number of patients who became symptom free. Percentage improvement is lower in group B (46.5%) than in group A (57.1%) than in group C (77.1%). So, the order of improvement is **Group B < Group A < Group C**. These differences of improvement are may be due to, in Group C combine therapy is given (Siravyadha and Ajamodadi Vataka) these both have Vata Shamaka effect on Ruka. In group A single therapy Siravyadha is given, vitiation of Rakta by Vata Dosha and this should be removed by Siravyadha. In Group B only Ajamodadi Vataka was given, this Vataka has mild Vata Shamaka properties. So, the lesser improvement seen in Group B.

Improvement Status for S.L.R Test within the groups

In group A: significant improvements were found from 1st month to AT with % imp 27.9%, 48.8%, 65.1% and 65.1% at 1st month, 2nd month, 3rd month and AT respectively. **In group B:** significant improvements were found from 1st month to AT with % imp 22.7%, 45.5%, 61.4% and 61.4% at 1st month, 2nd month, 3rd month and AT respectively. **In group C:** significant improvements were found from 1st month to AT with % imp 43.8%, 59.4%, 87.5% and 87.5% at 1st month, 2nd month, 3rd month and AT respectively. **Intergroup Comparison:** The comparative observation in all three groups shows that after 1 month of treatment their improvement was 27.9% in group A, 22.7% in group B and 43.9% in group C. After two-month probability of improvement was 48.8% in group A and 45.5% in group B and 59.4% in group C. After third month probability of improvement was 65.1% in group A, 61.4% in group B and 87.5% in group C. Percentage improvement is lower in group B (61.4%) than in group A (65.1%) than in group C (87.5%). So, the order of improvement is **Group B < Group A < Group C**.

Overall Improvement Status

Maximum improvement was found in group C (relieved 40%, More improved 53.3%) followed by the group A (relieved 53.3%, more improved 13.3%). The significant difference was observed in proportion of various levels of improvement among the groups ($p=0.022$)

CONCLUSION

The present clinical trial was planned to develop an Ayurvedic regimen for the management of Gridhrasi by taking Sanshaman Chikitsa along with Sanshodhan Karma. The duration of trial was three months and patients were examined monthly. The present study leads to the following conclusions. Gridhrasi is almost similar to that of Sciatica of modern medicine. Persons of early Praudawastha (middle age group i.e 31-50 yrs) were highly affected by Gridhrasi. Persons with Vata Kaphaj Prakriti were more prone to Gridhrasi (60-67%). Regarding Agni and bowel habit Mandagni was observed and most of the patient were of constipated. Out of 45 Patients Vata Kaphaj type of Gridhrasi was present in 29 (64.4%) patients. Whereas Vata Pittaja type of Gridhrasi was present in 6 (13.3%) patients and Pitta Kaphaj type of Gridhrasi was present in 10 (22.2%) patients. Total 45 patients were registered for the clinical trial which were divided in to three groups, 15 in each group, 'A', 'B' and 'C'. **In Group A(Sira Vyadha) :**The patient of this group treated with sira vyadha. **In Group B (Ajmodadi Vati) :**In this group, Ajmodadi vati was given 500 mg/BD with lukewarm water for 30 days. **In Group C (Combined Therapy).** In this group, both the therapies were given.

- Therapeutic efficacy of all trial regimens was significant with overall improvement. Maximum improvement was found in group C (relieved 40.0%. more improved 53.3%) followed by group A (relieved 53.3%, more improved 13.3%). The significant difference was observed in proportion of various level of improvement among the group ($p=0.022$).
- Regarding comparative significance of the regimen in all three groups statistically, maximum significance (93.9%) was observed in group C treated with combined therapy (Sira Vyadha and Ajmodadivati) followed by 73.4% significance observed in group B, and satisfactory in group A (66.6%).
- It is further concluded that similar studied must be undertaken in a large number of cases of the longer duration to confirm the conclusion and its further verification. Thus, this regimen proves a valuable contribution from Ayurveda to whole medical world and ailing humanity.

REFERENCES

- Dr. Gorakhnath Chaturvedi, Charaka Samhita - Vidhyotini Hindi Commentary by Pt. Kashinath Shashtri, , Pub. By Chaukhambha bharti Academy, Gokul Bhavan Varanasi, 1984 Chiki. Sth.28.
- Dr.Ambika Dutta Shashtri, Sushrut Samhita - Ayurveda Tatva Sandipika Hindi commentary by Kaviraja , Pub. Chaukhambha Sanskrit Sansthan Varanasi, 1996 Ni.Sth.1.
- Kaviraja Atrideva Gupta, Astang Hridaya - Vidhyotini Hindi Commentary by Pub Chaukhambha Sanskrit Sansthan Varanasi, 1993 Ast. Hri. Ni,15 Addhyaya.
- Rajeshwar Dutta Shastri, Bhaishajya Ratnawali - By Govind Das Sen commentary by Ambika Dutta Shastri Ed. By, Chaukhambha Sanskrit Sansthan Varanasi 1971, Addhyaya 26
- Dwitya Bhagah, Siddhanta Nidana - By Vachaspatyam, , Amlashuladi Prakaran 6/412-13.
- Vaidya Hari Das Shridhar, Ayurvediya Panch Karma Vigyan - Written by, Kasture, 6th Ed. Pub.by Shri Vaidhyanath Ayurved Bhavan, Ltd.,Great Naga Road, Nagpur-9.

Macleod, Davidson - Principle and Practice of medicine by john Ed. 15th 1987, Page no. 801.

A.F. Golwalla & S.K. Golwalla - Medicine for students, 18th Ed. Pub. By Dr. A.F. Golwalla Empress Court. Erosbuilding Chuchgate, Mumbai (1999).

Gerard J. Tortora, Tartora, Principles of Anatomy and Physiology 9th Ed. Pub. By John Wiley & Sons, New York.

E. Braunwald, Harrison - Harrison's Principles of internal medicine by Ed. 12th.

